Computer software patents: the debate continues

Introduction
The patentability of computer software has long been the subject of considerable debate in the UK and in Europe. Potential patentees argue that there is not sufficient protection of their intellectual property in computer software under current laws. Opponents argue that the existing patent and copyright systems do adequately protect software and remain nervous about attempts to argue for specific protection.

In 2005 the European Parliament rejected a proposed directive on the matter of patentability of computer software. In recent years the UK Intellectual Property Office (the “IPO”) and the European Patent Office (the “EPO”) have taken different approaches and there has been conflicting case law.

While the Court of Appeal decision in Aerotel v Telco, Macrossan’s Application [2006] EWCA Civ 1371 (“Aerotel/Macrossan”) led the IPO to apply a strict test which essentially precluded patent claims directed at the relevant software itself (as opposed to method or apparatus claims), the recent judgment of Astron Clinica Ltd and others v Comptroller General of Patents, Designs and Trade Marks [2008] EWHC 85 (Pat) has led to a revised IPO approach which should make it easier to obtain a patent in respect of computer software.

However, the position remains a long way off the more permissive US approach to software patents and it remains unclear as to whether the EPO and IPO approaches will always lead to the same decision as to whether a patent can be granted. In particular, the recent judgment of Symbian Limited v Comptroller General of Patents, Designs and Trade Marks [2008] EWHC 518 (Pat) suggests that the debate is far from over.

Excluded Subject Matter under the Patents Act 1977
The issue hinges on the provisions of the European Patent Convention (“EPC”), as implemented in the UK by section 1(2) of the Patents Act 1977 (the “Act”).

Article 52(2) of the EPC excludes from patentability, amongst other matters, “programs for computers”. However, Article 52(3) provides that a patent application will be rejected as unpatentable only to the extent that it relates to “such subject-matter or activities as such”. The thrust of the section appears to be that a patent involving the incidental use of excluded subject matter is not automatically excluded but that if the patent application directly and solely relates to software, it will be refused even if the requirements for granting patents (e.g. novelty and inventive step) are otherwise met. However, case law and the practices of the IPO and EPO to date have demonstrated that there are numerous views about how “as such” should be interpreted and the stage at which analysis of the exclusion should be undertaken.

EPO case law considers claims to a computer program to be allowable under Article 52(3) if the software program, when run on a computer, produces a further technical effect which goes beyond the normal physical interactions between the program and a computer (this was first recognised by an EPO Board of Appeal in IBM/Computer Program Product (1999) T1173/97 and was confirmed in IBM/Computer Program Product II (1999) T0935/97). Essentially the EPO looks to assess a patent application by reference to the technical problem it addresses and the solution it provides. In contrast, the IPO has tended to take a much stricter view.

Aerotel/Macrossan and the four-step test
In Aerotel/Macrossan the Court of Appeal reviewed earlier UK and EPO case law. The Court criticised the EPO for being inconsistent in its approach (in particular, the decisions of Pensions Benefit System Partnership (2000) T931/95, Hitachi/Auction method (2004) T258/03 and Microsoft/Data transfer (2006) T424/03 were criticised). It sought to re-formulate a new four-step...
approach consistent with the earlier Court of Appeal judgment in Merrill Lynch’s Application [1989] RPC 561 to be applied in respect of patent applications which cover excluded subject matters.

The Aerotel/Macrossan test involves the following four steps:

1) properly construe the claim (in order to identify what monopoly the patent encompasses before determining whether the monopoly is excluded);

2) look at the substance rather than the form of the claim and assess what the inventor has added to human knowledge;

3) apply the “as such” qualification (i.e. does the claim solely fall within excluded subject matter?); and

4) check whether the contribution is actually technical in nature.

Step four was seen as necessary to confirm with the earlier Merrill Lynch decision but in practice the check would be performed as part of step three.

**Criticism of Aerotel/Macrossan and the IPO practice**

An application to appeal the Aerotel/Macrossan decision was rejected by the House of Lords. Following the decision, the IPO took the four step test to supersede the earlier decisions and interpreted the Court of Appeal’s judgment such that patent claims directed to computer program products alone were refused even when such claims referred to claimed methods that were otherwise seen to be allowable.

The decision and the emergent practice of the IPO has been criticised on the basis that it is increasingly divergent from EPO practice and EPO case law. It is worth noting that the EPO did not reconsider its approach following the Aerotel/Macrossan decision and rejected a call by the Court of Appeal to refer the

meaning of “technical “to the Enlarged Board of Appeal for consideration on the basis that there were insufficient differences in Board of Appeal decisions to justify a referral.

While software is protected by the law of copyright in the UK (as is often pointed out by opponents of software patents), copyright protection only protects code against copying and therefore does not protect an inventor if a competitor independently comes up with the same idea (or the inventor does not have sufficient evidence to prove copying). Potential patentees alleged that the IPO practice following Aerotel/Macrossan could hinder British industry on the basis that inventions reliant on novel software could not be adequately protected. Without a patent to the actual software programs, patentees only have limited recourse (namely the contributory infringement provisions of section 60(2) of the Patents Act 1977) against competitors who sell, produce or market similar products in the UK and the protection offered by these provisions does not apply to sale of the software in the UK where they are intended for use abroad. Against that it is said that the limited protection correctly reflects the level of creative input and that creating a new system of rights to address software would itself lead to uncertainty.

**Astron Clinica – the IPO is forced to change its position**

Critics of the IP approach no doubt breathed a sigh of relief when, on 25 January 2008, the High Court ruled in the Astron Clinica case that the IPO was wrong to reject computer program patent claims on the basis that they are necessarily prohibited by Article 52 of the EPC and s.1(2) of the Act.

The case concerned an appeal from a decision of the IPO from six UK patent applications where, in each case, the examiner and hearing officer had found method and apparatus claims to be allowable but had refused to allow claims to the corresponding programs on a storage medium on the ground that such claims related to unpatentable subject matter.

The appellants essentially argued that the IPO should not exclude computer programs which if, when run on a computer, produce a novel technical effect.

In reviewing the previous case law, the High Court held that, in a patent application where claims to a method using a programmed computer and/or to a computer system to carry out the method were allowable, claims to the computer program itself should, in principle, also be allowable.

Kitchin J did not accept the EPO’s previous decisions or its approach but considered his conclusion that the IPO was wrong was consistent with the Court of Appeal decision in Aerotel/Macrossan. He considered the following points to be material (paragraphs 47-50 of the judgment):

> in Aerotel/Macrossan the court had not been required to consider what claims were permissible in the case of a computer related invention which made a contribution extending beyond excluded subject matter.

> there was nothing in the reasoning of the Court of Appeal which suggested that all computer programs were necessarily excluded. The Court of Appeal’s criticism of the reasoning of the EPO Board of Appeal in three previous cases (Pensions Benefit System Partnership (2000) T931/95, Hitachi/Auction method (2004) T258/03 and Microsoft/Data transfer (2006) T424/03) was directed at the form over substance approach with the drawing of a distinction between a program as a set of instructions and a program on a carrier.
in developing their four-step test, the Court of Appeal in Aerotel/Macrossan considered it was doing no more than applying a re-ordering of the Merrill Lynch test. For this reason, the application of the Aerotel/Macrossan test should produce the same result as the earlier judgments.

> it is highly undesirable that the provisions of the EPC are construed differently in the EPO from the way they are construed in the national courts of a Contracting state.

Furthermore, Kitchin J found that, although Aerotel/Macrossan was critical of certain EPO decisions, it did not specifically criticise the main decisions relating to the issue set out in IBM/Computer Program Product and IBM/Computer Program Product II. He added that those decisions, which emphasise that the intention of Art. 52(2) and (3) is not to exclude all computer programs from patentability, were still followed in the EPO (see for example, the Board of Appeal decision in Tao Group Limited (2007) T121/06)).

On the basis of the above, Kitchin J found that the appeals should be allowed. Kitchin J’s decision, which appears to have been heavily motivated by the desire to harmonise IPO and EPO policy, is a sensible application of the principle of substance over form and provides a helpful analysis of the principles in Aerotel/Macrossan.

Is the debate really over?
The IPO, having considered the judgment, decided not to appeal the decision and has issued a new practice notice (7 February 2008). Its practice notice provides that where claims to a subject matter that was itself excluded – i.e. the claim was confined to the improvement of one piece of software by another.

Patten J considered the case law, including the application of the Aerotel/Macrossan and Astron Clinica decisions and found that the application of steps three and four as separate tests led to some confusion. In his view, the case law does not preclude the patenting of software aimed at improving other software. He allowed the appeal on the basis that he failed to see “why a program which has some novel technical effect on an important component in the computer’s operating system should not qualify as doing more than merely operating a computer program notwithstanding its effect is to solve what on one view is a software problem affecting the functionality and reliability of a computer.”

Conclusion
Patten J was no doubt influenced in the Symbian case by the fact that the EPO had granted Symbian a patent less than six weeks after the IPO refused an equivalent application. However, the IPO has indicated it intends to appeal the decision.

The different approaches taken to the issue of the patentability of software by the IPO and EPO (and the English and European courts) may still potentially lead to different results. While the Astron Clinica decision, in particular, has gone some way to clarifying the position, recent case law serves to demonstrate that the issue of the patentability of software is particularly difficult, controversial and often fact-specific and will no doubt be the subject of further debate for some time.